Pre-radiator

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Progress

- Chamber
  - Data taking for large angles has started.
  - Chamber without Al extrusion is being tested.
- Scintillator
  - Flat surface (one side).
  - Nearly rectangular shape.
  - Hole quality will be improved.
- Prototype
  - IIIc has been completed.
  - The design of IV (full scale module) is nearly completed. Construction will start soon.
- Electronics
  - ADC board has been delivered and is being tested.
  - TDC board design is in progress.

Action Items

1. Need to provide performance evaluation of specifications by simulation, i.e. S/B vs $\Delta E/E$, $\Delta\theta$, etc…all items on spec page.

   Appealing to MC group. TN

2. Provide mechanical details of chamber/scintillator support/connectivity---issue of mechanical stability of thin chambers held from bottom without lamination to scintillator package?

   Will see in a month. RH

3. Estimate of time and cost to post-machine scintillator extrusion.

   Working. RH

4. Suggest test cutting of prototype extrusion.

   Done.

5. Measurement of light yields before and after machining.

   No change (within 10 %).

6. Measurement of uniformity of response along length of extrusion before and after machining.

   n/a. However, in progress. AS/SB

7. Measurement of response across lap joints.

   In progress AS/SB

Action Items cont'd

8. Address issue of changing response with age given number of glue joints in plane and fibers.

   In progress as a part of (7).

9. Suggest plan for combined prerad and shashlyk test (use of existing 5x5 array tested last year?)

   In 3 months… AS

10. Provide simulation resources to answer open issues (i.e. notches vs slit, etc). Who?

    Appealing to MC group. TN

11 Discuss robustness of chambers without fins---broken wire lose whole plane?

   Curling… We'll see soon.

12. Provide written specs on utility requirements.

    After IV construction… PA

13. Provide written spec/plan for space.

    After IV construction… RH

14. How are chambers purged (N2?) Anticipated leak rates and safety issues?

    5-10 % may leak → 4 lit./min of N2.

Pre-radiator Project Schedule

- 2.4.1 Chamber
  Chamber, gas system
- 2.4.2 Scintillator
  Extruded scintillator → sheet (machining, gluing)
  Fibers, PMTs
- 2.4.3 Electronics
  Front end electronics, Anode (TDC), Cathode (ADC),
  HV, Cables, Slow control, Readout (for scint.), Cooling
- 2.4.4 Mechanical
  L-plates, Support rails,… Transport, Storage…
- 2.4.5 Photon Veto (Who?)
  Shashlyk

Design and Construction Project Schedule

Subsystem	Category	Start Date	Compl Date
Preradiator			
2.4	R&D/Design	7/1/04	12/31/04
	Prototypes	7/1/04	6/30/05
	Production	1/1/06	9/30/08
	Installation	6/1/2006	9/30/08
Chamber 2.4.1	Design	7/1/2004	9/30/2004
	Prototype	7/1/2004	11/30/2004
	Production	1/1/2006	6/30/2008
Scintillator 2.4.2	Design	7/1/2004	9/30/2004
	Prototype	7/1/2004	12/31/2004
	Production	1/1/2006	6/30/2008
Electronics 2.4.3	Design	7/1/2004	12/31/2004
	Prototype	7/1/2004	6/30/2005
	Production	1/1/2006	3/31/2008
Mechanical 2.4.4	Design	7/1/2004	12/31/2004
	Prototype	7/1/2004	6/30/2005
	Production	1/1/2006	6/30/2008
Photon veto 2.4.5	Production	1/1/2006	6/30/2008